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METHOD FOR ADJUSTING BATTERY POWER LIMITS IN A HYBRID ELECTRIC VEHICLE TO PROVIDE CONSISTENT LAUNCH CHARACTERISTICS

ABSTRACT OF THE DISCLOSURE

A method is disclosed for improving the performance of an energy storage system that incorporates a high density electrical energy storage device, such a battery or ultracapacitor. The method may be implemented in an energy storage system of a hybrid electric vehicle (HEV) as a computer control algorithm for controlling the discharge power limits of an energy storage device, such as a battery. The method allows the discharge power limits of the battery to be temporarily expanded under vehicle launch conditions where the power demands are high, thereby making additional stored energy available for use under such conditions by improving battery utilization and providing more consistent vehicle launch characteristics than would otherwise be available.